

Nevada Division of Environmental Protection Bureau of Water Pollution Control Groundwater Protection Branch

Underground Injection Control Program



FACT SHEET

(Pursuant to NAC 445A.236)

Permit name: **Large-Capacity Septic System General Permit Permit Type: General Permit to Operate and Discharge**

Permit Number: GU9201 (formerly GNEV9201)

Effluent from a large-capacity septic system Description of discharge:

System Capacity: 5,000 to 15,000 gallons

Receiving Water Characteristics: Ground water Location: Statewide

Regulations: NAC 444.8302, NAC 445A.228, NAC 444.755, 444.764, NAC 444.765

NAC 445A.266 through NAC 445A.272, inclusive

General Information: The permit is intended for the installation and operation, including the discharge of effluent¹, of a large-capacity septic systems (LCSS)² that processes only sanitary waste³, and is designed to protect public health and existing or potential underground sources of drinking water. This permit was originally issued in May 1993. The permit will be revised and renewed for a five (5) year period.

The intent of this permit is to cover a septic system or group of septic systems clustered together creating a high density of effluent discharge that will lead to ground water contamination.

Recent changes in underground injection control regulations at the federal and state level now require largecapacity septic systems to be regulated by the Underground Injection Control Program. NAC 445A.838 now defines a well to include subsurface fluid distribution systems.

This general permit is now being revised and modified to include a reasonable monitoring and maintenance program to ensure these large systems do not fail and cause surfacing of effluent and/or ground and surface water contamination. Septic system size/capacity is dependant upon the number of fixtures within the building. the number of persons served, and site-specific flow conditions. The chambers must be inspected and cleaned regularly to maintain pollutant removal efficiency, to ensure proper flow conditions are maintained, and to prevent blockage of drain field piping.

The types of facilities covered under this general permit include commercial and industrial facilities, and large public and private properties with a total septic capacity of 5,000 gallons per day or greater. A maximum "system" size that can be authorized under this general permit is being limited to a 15,000-gallon capacity for all newly permitted systems. Older systems currently covered as of the date of this permit renewal will continue to be covered by this permit until such time as an individual permit is warranted. The 15,000-gallon limit applies to either an individual tank size or a combined total of all tanks on one property. This general permit does not cover systems at multiple sites owned by the same responsible party.

¹ NAC 444.7606 "Effluent" defined. (NRS 439.200, 444.650) "Effluent" means partially or completely treated sewage that flows out of a septic tank or an alternative treatment system.

² Large-Capacity Septic System - is defined as a system having a capacity equal to or greater than 5,000 gallons per day (gpd). These systems can be one large tank or a group of smaller tanks under one ownership that serves commercial and/or multiple-dwelling structure(s) on a common property.

³ Sanitary waste – defined under NAC 445A.8332

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Examples of facilities:

- 1. Mobile Home Parks, RV Parks
- 2. Schools
- 3. Churches
- 4. Ranches, with multiple dwelling septic tanks
- 5. State and National Parks
- 6. Casinos, Motels and Inns
- 7. Malls and Shopping Centers
- 8. Mines

Installation, Operation and Maintenance: Installation of an Individual Sewage Disposal System (ISDS) that is or will be used as a commercial sanitary waste system must be designed by a State licensed engineer. Proper operation and maintenance (O&M) of a septic system is important to the longevity of the system. Inadequate septic system operation and maintenance can lead to failure even when systems are designed and constructed according to regulation. System owners should continuously monitor the drain field area for signs of failure, including odors, surfacing sewage, and lush vegetation. The septic tank(s) and distribution box(s) should be *inspected biannually* to ensure that the internal structures, including pumps, are in good working order and to monitor the solids/sludge and scum level. Septic tanks should be pumped every four years, if the tank is not checked. Many systems fail due to hydraulic overloading that leads to surfacing of effluent and/or raw sewage. Reducing wastewater volumes through *water conservation* is important to extend the life of the drain field. In addition, surface runoff from driveways, roofs, and patios should be directed away from the drain field.

Please refer to water technical sheet WTS-23 and large-capacity septic system Requirements Checklist on our website for additional information on our website at www.ndep.nv.gov (link: Water Pollution Control).

<u>Legal Authority:</u> Large-capacity septic systems are defined as a point source by NRS 445A.395 and are prohibited from discharging into any waters of the State without a permit by NRS 445A.465. This general permit regulates effluent discharged into or above groundwater (where pollutants could be carried into groundwater, pursuant to NRS 445A.465) from a septic system, which is not regulated by an existing individual discharge permit or underground injection permit, or local ordinance or regulation which meets or exceeds the requirements of this permit. Authority for issuance of a general discharge permit is found at NRS 445A.475 and NAC 445A.266 through NAC 445A.272, inclusive. Also, NAC 445A.891 through NAC 445A.896.

NAC 444.764 "Individual sewage disposal system" defined. (NRS 439.200, 444.650)"Individual sewage disposal system" means a single system of sewage treatment tanks and effluent disposal facilities serving:

- 1. A single-family dwelling; or
- 2. In the case of a commercial system, one or more buildings that are not used as single-family dwellings.

NAC 444.755 "Commercial system" defined. (NRS 439.200, 444.650) "Commercial system" means an individual sewage disposal system that serves one or more buildings which are not used as single-family dwellings. The term includes, without limitation, an individual sewage disposal system serving offices, watchmen's quarters, bunkhouses, labor camps, parking facilities for recreational vehicles, factories, multiple-dwelling structures, hotels and shopping centers.

NAC 444.765 "Multiple-dwelling structure" defined. (NRS 439.200, 444.650) "Multiple-dwelling structure" means one or more structures located on one lot which have separate units that are used as living quarters. The term includes, without limitation, a duplex, a triplex, a condominium and an apartment building.

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NAC 444.8302 General requirements for individual sewage disposal system used as commercial system. (NRS 439.200, 444.650)

- 1. The plans for an individual sewage disposal system designed for commercial use which has a capacity of less than 5,000 gallons per day must be submitted for review to the health authority for the county in which the proposed system will be located. If the capacity of the system is 5,000 gallons or more per day, the plans for the system must be submitted for review to the division of environmental protection of the State Department of Conservation and Natural Resources.
- 2. An individual sewage disposal system that is or will be used as a commercial system must be designed by an engineer.
- 3. Except as otherwise provided in NAC 444.750 to 444.8396, inclusive, an individual sewage disposal system with design flow capacities of less than 5,000 gallons per day must meet all of the minimum setback requirements and design criteria specified in NAC 444.750 to 444.8396, inclusive.

NAC 445A.228 Requirement; exemptions. (NRS 445A.425, 445A.465)

- 1. Except as otherwise provided in subsection 2, a person shall not discharge a pollutant from a point source into any waters of this state without obtaining a permit from the Department.
- 2. Although not exempted from complying with all other applicable laws, rules and regulations regarding pollution, the following are specifically exempted from the requirements to obtain a permit:
- (a) Persons utilizing an individual sewage disposal system or other sewage disposal system that uses a soil absorption system for the treatment and disposal of domestic wastes, with accumulative flows of less than 5,000 gallons per day, providing the system is approved and is installed, operated and maintained in accordance with the rules and regulations and other requirements of the district health departments or the State Board of Health. This exemption does not preclude the possibility that health authorities will require permits.
- (b) Except as otherwise provided in this paragraph, persons discharging pollutants into a publicly owned or privately owned sewerage system, if the owner of such sewerage system has a valid permit from the Department. In such cases, the owner of the sewerage system assumes ultimate responsibility for controlling and treating the pollutants which he allows to be discharged into the system. The Department may require an industrial user who discharges pollutants into a publicly owned treatment works which does not have an approved pretreatment program to obtain a permit pursuant to NAC 445A.257.

NAC 445A.838 "Well" defined. (NRS 445A.425) "Well" means:

- 1. A bored, drilled or driven shaft with a depth greater than the largest surface dimension;
- 2. A hole which is dug, with a depth greater than the largest surface dimension;
- 3. An improved sinkhole; or
- 4. A subsurface fluid distribution system, not including subsurface fluid distribution systems associated with septic systems that have a capacity of 5,000 gallons or less per day.

<u>Summary of Revisions and Modifications to the Existing General Permit:</u> The following significant changes have been made to the existing permit:

- 1. Limit the maximum size that can be authorized under this general permit to 15,000-gallon capacity for all newly permitted systems. Older systems currently covered as of the date of this permit renewal will continue to be covered by this permit until such time as an individual permit is warranted. The 15,000 gallon limit applies to both an individual tank size or a combined total of all tanks on one property;
- 2. Requirement to complete a system evaluation form (attached) once every two years, which will be mailed out by the UIC Program compliance section;
- 3. To make available a LCSS fact sheet to all tenants.

Discharge Limitations and Monitoring Requirements:

Biennial Monitoring Report – <u>Due May 31 of every odd-numbered year</u> – The Permittee shall receive a system evaluation form, along with their annual invoice, to be completed and returned to the Division. The report shall include the following information:

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- a. The flow estimate and type of facility served by the septic system have not changed, or if they have, provide a certified description of the details of the change(s):
- b. A certified description of any changes made to the system.
- c. The depth of scum, sludge, and total liquid in the septic tank(s) shall be measured and recorded every 12 months or as directed by the Division (See Part B: 1b of the General Permit GU9201);
- d. The Permittee shall record the following additional information for each instance of septage disposal (must be by licensed pumper) and retain records on site:
 - 1. Volume of septage pumped,
 - 2. Disposal method and site, and
 - 3. Names of all pumping, transporting, and disposal companies and facilities used.
- e. A narrative describing inspection and maintenance activities which includes inspection and maintenance logs

Note: In every odd-numbered year, a System Evaluation Report will be mailed out on April 1 to all Permittees. The report is due May 31. The two reasons the reports are sent out in April are: 1) this is the wettest time of year; and 2) the groundwater is at or near its seasonal high. This will help to identify any problems with the leach field at the worst time of year.

Proposed Determination: The Division of Environmental Protection has made the tentative determination to reissue this general permit.

Procedures for Public comment: Notice of the Division's intent to issue the permit is being sent to all weekly and daily Nevada newspapers. The notice will also be mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing to the address provided below for a period of 30 days following the date of the public notice. The Administrator can extend the comment period.

A public hearing on the proposed determination to issue the general permit can be requested by any affected potential applicant, any affected State, any affected interstate agency or any interested agency, person or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

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